

REMARKS

Favorable reconsideration of this application in light of following remarks is respectfully requested.

Claims 1-4, 6, 8, 9 and 14-36 are pending in this application. Claims 1, 16-20, 29, 31-33, 35 and 36 are amended. Claims 1 and 16-20 are independent claims.

Drawings

Applicants respectfully request the Examiner acknowledge the drawings have been accepted by the USPTO or identify any perceived deficiencies so Applicants have a full and fair opportunity to traverse or address any perceived deficiencies.

Priority Documents

Applicants request the Examiner acknowledge receipt of the priority documents for this application.

Information Disclosure Statements

Applicants respectfully request the Examiner acknowledge consideration of the references filed in the Information Disclosure Statements on March 17, 2008, April 18, 2008 and April 28, 2008.

Amendments to Independent Claims

Before turning to the outstanding art rejections, Applicants take this opportunity to emphasize amendments to the independent claims that are believed to further clarify the claims and further distinguish the claims over the cited references as explained later. For example, independent claim 1 is amended to recite the following.

1. A computer-readable recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:
 - a data area storing at least video data as a transport stream in more than one file, each file associated with a different one of the multiple reproduction paths, and

the files being interleaved with one another; and

a navigation area storing at least one navigation list, the at least one navigation list including one or more navigation data items and controlling a reproduction order of the one or more navigation data items, at least one navigation data item referencing more than one map and including an indicator for indicating that the corresponding at least one navigation data item is provided for the multiple reproduction paths, each map being associated with one of the files and providing position data for the video data of the associated file.

Applicants note that at least the above-emphasized features of independent claim 1 are believed to distinguish over the cited references. Applicants note that each of independent claims 16-20 recite somewhat similar features.

Example Embodiments providing Support for Claim Amendments

This section is provided to identify support for the above-emphasized features of amended claim 1 and the similar features of independent claims 16-20. In particular, Applicants note that paragraph [0054] of Applicants' specification states “[t]he program type ‘PG_TY’, besides ‘Protect’ flag, includes ‘S/M’ flag and 3-bit number of channels ‘Channel_Ns’ where the ‘S/M’ indicates whether an associated PG includes a single-channel or a multi-channel stream.” Further, the example embodiment of FIG. 4 illustrates the ‘PG_TY’ is included in the program information (PGI#n) and the example embodiment of FIG. 7 illustrates that PGI #1 is associated with more than one PTMAP. Applicants note that these portions of the specification provide for managing single and multiple reproduction paths.

Applicants submit that at least the above identified portions of Applicants' specification provide support for the following feature of amended claim 1: at least one navigation data item “including an indicator for indicating that the corresponding at least one navigation data item is provided for the multiple reproduction paths,” and the similar features of independent claims 16-20.

Claim Rejection under 35 U.S.C. § 103

Claims 1-4, 6, 8-9, and 14-36 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Okada (U.S. Patent Publication No. 2002/0046328) in view of Yamamoto et al. (U.S. Patent No. 5,742,569, herein Yamamoto) and further in view of Saeki et al. (U.S. Publication No. 2001/0043790, herein Saeki). Applicants respectfully traverse this rejection.

As explained in the previous two sections of this Amendment, the independent claims and example embodiments providing support for features of the independent claims provide a navigation area for managing multiple reproduction paths that is not disclosed, taught or suggested in the cited references of Okada, Yamamoto and Saeki as further explained below.

On page 3, lines 4-7 of the Office Action mailed January 28, 2008, the Examiner seems to primarily be relying on Okada as describing multiple reproduction paths in light of the citation of FIGS. 26 and 29 illustrating multiple channels. On page 3, lines 20-23 of the Office Action, the Examiner acknowledges that Okada does not disclose the specifics of the navigation data list, navigation data items and maps recited in independent claim 1 for managing the multiple reproduction paths. The Examiner relies on newly cited references Saeki and Yamamoto to cure these deficiencies of Okada.

Yamamoto

The Examiner cites FIGS. 5-7B; column 12, lines 1-34; and column 15, line 29 to column 16, line 40 of Yamamoto as disclosing features of the navigation area recited in claim 1.

FIG. 5 of Yamamoto shows a structure of an interleaved unit; FIG. 6 shows a structure of a program chain PGC 61; FIG 7A discloses information included in a cell; and FIG. 7B shows cell identification information. Further, column 12, lines 1-34 indicates that a reproduction order for each program 60 may be controlled using program chain information PGCI and that an

author may select a reproduction method from one of the following: (i) random reproduction, (ii) shuffle reproduction, (iii) loop reproduction and (iv) combination of loop reproduction with the random reproduction or the shuffle reproduction. Still further, column 15, line 29 to column 16, line 40 of Yamamoto describes FIGs. 6-7B. However, Applicants submit that none of these cited portions of Yamamoto specifically describe, teach or suggest a map being associated with a file and providing position data for the video data of the associated file. Further, Applicants submit that Yamamoto does not specifically describe navigation information for managing single and multiple reproduction paths.

Accordingly, Applicants submit that Yamamoto, like Okada, fails to disclose, teach or suggest at least one navigation data item “including an indicator for indicating that the corresponding at least one navigation data item is provided for the multiple reproduction paths,” and the similar features of independent claims 16-20.

Saeki

Saeki is primarily directed towards reducing the amount of special reproduction information required for functions such as fast forward and rewind while recording AV data in real time. FIG. 9 of Saeki illustrates a cell (CELL #1) that references more than one time map (TIMEMAP #1, TIMEMAP #2), and the Examiner reads the cells (CELL#1, CELL#2) of Saeki on the at least one navigation data items of Applicants’ claims 1 and 16-20.

However, Applicants note that there is no indication in Saeki that the cells include an indicator indicating the whether the cell is related to a single reproduction path or multiple reproduction paths. As such, Applicants submit that Saeki, like Yamamoto and Okada, fails to disclose, teach or suggest at least one navigation data item “including an indicator for indicating

that the corresponding at least one navigation data item is provided for the multiple reproduction paths,” as recited in claim 1 and the similar features of independent claims 16-20.

Combinability of Okada, Saeki and Yamamoto

Applicants take this opportunity to object to the combination of Okada, Saeki and Yamamoto. In particular, Applicants primarily object to the use of either Saeki or Yamamoto with Okada. The navigation information described in Okada is completely different from the navigation information described in either Saeki or Yamamoto. For example, FIG. 44 of Okada illustrates a management table 150. Applicants submit that replacing the management table 150 described in Okada with the navigation information described in Saeki or Yamamoto would amount to a complete redesign of Okada since none of the features shown in management table 150 clearly correspond to the data management file shown in FIG. 9 of Saeki or the information shown in FIGS. 5-7B of Yamamoto.

Page 4, lines 5-8 of the Office Action states “[t]herefore in light of the teaching in Saeki it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by providing a navigation data item referencing more than one map in order to arrange address,” and page 3, lines 15-17 states “[t]herefore in light of the teaching of Yamamoto it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by including navigation units in order to control the data.”

Applicants believe these motivations are lacking since there is no indication how the cited portions of Saeki or Yamamoto correspond to any of the management information described in Okada. For example, there does not appear to be any disclosure of PGCS, cells, or time maps in Okada.

In light of the above, Applicants respectfully request the rejections of independent claims 1 and 10-16, as well as all claims depending therefrom, under 35 U.S.C. § 103(a) be withdrawn.

Request for Interview

Should the Examiner determine the above arguments do not overcome the rejections, Applicants request the Examiner contact Applicants' representative at the telephone number below so that an interview can be scheduled to provide the Applicants with an increased understanding of the Examiner's position and to allow Applicants' representative to further explain the Applicants position. The requested interview will allow the Applicants to determine whether further claim amendments may be helpful or if an Appeal is the appropriate course of action.

CONCLUSION

Accordingly, in view of the above remarks, reconsideration of the rejections and allowance of each of claims pending in this application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Scott A. Elchert at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By

Terry L. Clark, Reg. No. 32,644

Scott A. Elchert, Reg. No. 55,149

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

TLC/SAE/ame